



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

SEP 22 2017

REPLY TO THE ATTENTION OF:

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Stephen Florek, Detroit Abrasives EHS Engineer  
3M Company  
11900 E Eight Mile Road  
Detroit, Michigan 48205

Re: Notice of Violation  
3M Company  
Detroit, Michigan

Dear Mr. Florek:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation (NOV) to 3M Company – Detroit Abrasives (you) under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1). We find that you violated the conditions of your permit at your Detroit, Michigan facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the NOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contacts in this matter are Marie St. Peter, environmental engineer, and Leonardo Chingcuanco, associate regional counsel. You may call either of them at (312) 886-4746 or (312) 886-7236, respectively, to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Edward Nam', written in a cursive style.

Edward Nam  
Director  
Air and Radiation Division

cc: Tom Hess, MDEQ  
Mina McLemore, MDEQ  
Jorge Acevedo, MDEQ

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

**IN THE MATTER OF:**

3M Company  
Detroit, Michigan

Proceedings Pursuant to  
Section 113(a)(1) of the  
Clean Air Act, 42 U.S.C.  
§ 7413(a)(1)

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) **NOTICE OF VIOLATION**  
)  
) **EPA-5-17-MI-04**  
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**NOTICE OF VIOLATION**

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation (NOV) to 3M Company (3M or you) to notify you that we have found violations of the Clean Air Act (CAA), 42 U.S.C. §§ 7401-7671q, and its implementing regulations at your facility located at 11900 E Eight Mile Road in Detroit, Michigan (the Facility).

This NOV is being issued in accordance with Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), which authorizes the Administrator of the EPA (Administrator) to take certain enforcement actions after notifying a person that is in violation of the CAA. The Administrator delegated this authority to the Regional Administrator, who redelegated to the Air and Radiation Division Director.

The relevant statutory and regulatory background, factual background, finding of violations, and environmental impact of these violations are set forth as follows:

**Relevant Statutory and Regulatory Background**

1. The CAA is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. *See* Section 101(b)(1) of the CAA, 42 U.S.C. § 7401(b)(1).

*Michigan SIP and Permit to Install*

2. Section 110 of the CAA, 42 U.S.C. § 7410, requires each state to adopt and submit to the Administrator for approval a plan which provides for the implementation, maintenance, and enforcement of all national primary or secondary air quality standards established pursuant to Section 109 of the CAA, 42 U.S.C. § 7409. These State Implementation Plans (SIP) are required to include enforceable emission limitations, control measures, schedules for compliance, and permit programs for sources.
3. On May 6, 1980 EPA approved R 336.1201 (Rule 201) as part of the federally approved Michigan SIP. *See* 45 Fed. Reg. 29,790. Rule 201(1) provides that no person shall install, construct, reconstruct, relocate or alter any process or control equipment thereto, which

may be a source of an air contaminant until issued a permit by the commission after submitting an application.

4. Rule 201 at Rule 201(3) further provides that an application for a permit to install (PTI) may be approved subject to any condition, specified in writing, that is reasonably necessary to assure compliance with these rules.
5. On May 6, 1980 EPA approved R 336.1910 (Rule 910) as part of the federally approved Michigan SIP. *See* 45 Fed. Reg. 29,790. Rule 910 requires that "an air-cleaning device shall be installed, maintained and operated in a satisfactory manner and in accordance with these rules and existing law."
6. On July 7, 2006 EPA approved R 336.1911 (Rule 911) as part of the federally approved Michigan SIP. *See* 71 Fed. Reg. 31,093. Rule 911 requires that "upon the request of the department, a person responsible for the operation of a source of an air contaminant shall prepare a malfunction abatement plan (MAP) to prevent, detect, and correct malfunctions or equipment failures resulting in emissions exceeding any applicable emission limitation."
7. Rule 911 at 911(2)(a) further provides that sources must specify "a complete preventative maintenance program, including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of major replacement parts that shall be maintained in inventory for quick replacement."
8. Rule 911 at 911(4) provides that "within 180 days after the department approves a malfunction abatement plan, a person responsible for the preparation of a malfunction abatement plan shall implement the malfunction abatement plan require by [R 336.1911(1)]."
9. Pursuant to 40 C.F.R. § 52.23, failure to comply with any approved regulatory provision of a SIP, or with any permit condition or permit denial issued pursuant to approved or promulgated regulations for review of new or modified stationary or indirect sources, or with any permit limitation or condition contained within an operating permit issued under an EPA-approved program that is incorporated in the SIP, shall render the person so failing to comply in violation of an applicable implementation plan and subject to enforcement action under Section 113 of the CAA.

*Permit to Install No. 318-01F*

10. On October 8, 2013, the Michigan Department of Environmental Quality (MDEQ) issued Permit to Install (PTI) No. 318-01F to 3M for the Facility.
11. PTI No. 318-01F identifies emissions unit EU-ABSRASIVEPAPER as an "abrasives material process consisting of web unwind, adhesive make coating application controlled by a regenerative thermal oxidizer (RTO), abrasive solids application controlled by a

baghouse, a main drying oven (natural gas-fired) controlled by the RTO, final size coating application, and a web wind.”

12. Special Condition (SC) IV.2 for EU-ABRASIVEPAPER provides that “the permittee shall not operate EU-ABRASIVEPAPER unless the RTO is installed, maintained and operated in a satisfactory condition. Satisfactory operation of the RTO includes a minimum VOC control (combined capture and destruction) efficiency of 91.2 percent (by weight), a minimum temperature of 1400°F, a minimum retention time of 0.5 seconds, and in accordance with an approved MAP as required in SC III.2 [of PTI No. 318-01F].”
13. SC III.2 for EU-ABRASIVEPAPER states that “the permittee shall not operate EU-ABRASIVEPAPER unless a malfunction abatement plan (MAP) as described in Rule 911(2) is implemented and maintained.” SC III.2.a further requires that the MAP specify a complete preventative maintenance plan.

#### **Factual Background**

14. 3M owns and operates an abrasive materials manufacturing facility at 11900 E Eight Mile Road in Detroit, Michigan. The facility operates EU-ABRASIVEPAPER identified in PTI No. 318-01F.
15. On April 7, 2017 EPA issued an information request pursuant to Section 114 of the CAA to 3M. This information request required the facility to perform compliance testing at EU-ABRASIVEPAPER to determine, among other things, its VOC capture and destruction efficiency (control efficiency).
16. On June 14, 2017 3M conducted capture efficiency testing for EU-ABRASIVEPAPER. This testing identified that its capture efficiency was 97.1%.
17. On June 15, 2017, 3M conducted a destruction efficiency testing for EU-ABRASIVEPAPER. This testing identified that its destruction efficiency was 92.9%.
18. Based on the results of 3M’s compliance testing, EU-ABRASIVEPAPER’s VOC control efficiency was 90.2%.
19. On June 30, 2017, 3M submitted to EPA a notification letter which stated the believed root cause for the low-VOC control efficiency shown during the June 14-15, 2017 compliance testing. 3M believes that preventative maintenance procedures performed out of sequence on May 26, 2017 resulted in the low destruction efficiency results of 92.9%.

### Violations

20. 3M's operation of EU-ABRASIVEPAPER without a minimum VOC control (combined capture and destruction) efficiency of 91.2 percent (by weight) is a violation of SC IV.2 of the permit, as referenced in paragraph 12 of this document.
21. 3M's operation of EU-ABRASIVEPAPER in a manner inconsistent with the approved MAP as required in SC III.2 is a violation of SC IV.2 of the permit, as referenced in paragraph 12 of this document.
22. 3M's operation of EU-ABRASIVEPAPER in a manner inconsistent with the approved MAP is a violation of R 336.1910, as referenced in paragraph 5 of this document.
23. 3M's maintenance of the EU-ABRASIVEPAPER RTO inconsistent with the approved MAP is a violation of SC IV.2 of the permit, as referenced in paragraph 12 and 19 of this document.
24. 3M's maintenance of the EU-ABRASIVEPAPER RTO inconsistent with the approved MAP is a violation of SC III.2 of the permit, as referenced in paragraph 13 and 19 of this document.
25. 3M's failure to properly implement the approved MAP is a violation of R 336.1911(4), as referenced in paragraph 8.

Date

9/22/17

Edward Nam

Director

Air and Radiation Division

**CERTIFICATE OF MAILING**

I certify that I sent a Notice of Violation, No. EPA-5-17-MI-4, by Certified Mail, Return

Receipt Requested, to:

Steven Florek  
3M Company  
11900 East 8 Mile Road  
Detroit, Michigan 48025

Michael Lukes  
3M Company  
3M Center, 244-5W-03  
St. Paul, MN 55144

# 70161370 0001 5719 9841

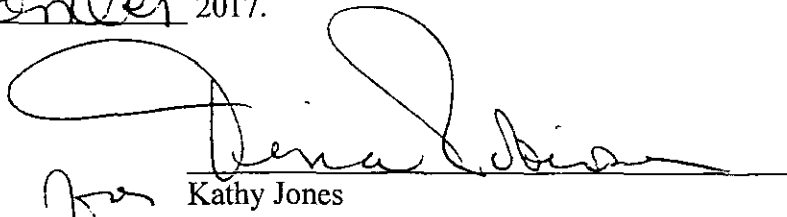
I also certify that I sent copies of the Notice of Violation by first-class e-mail to:

Tom Hess  
MDEQ Enforcement Unit Manager, Air Quality Division  
HESST@michigan.gov

Mina McLemore  
MDEQ Air Quality Division Detroit District Supervisor  
mclomorew@michigan.gov

Jorge Acevedo  
MDEQ Senior Environmental Engineer, Air Quality Division  
acevedoj1@michigan.gov

On the 22<sup>nd</sup> day of September 2017.

  
for Kathy Jones  
Program Technician  
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 70161370 0001 5719 9827